-2-

U.S. Application No.: 09/899,653

#### IN THE CLAIMS

1. (Currently Amended) A method for accessing documents using a graphical user interface, the method comprising the steps of:

accessing document properties for a document, the document properties indicating at least one of a size of the document, an age of the document, and a retrieval time required to obtain associated with the document;

rendering a document selection display that provides a document identifier associated with the document, the document identifier indicating, on the document selection display, a correlation between at least two of the size of the document, the age of the document, and the <u>retrieval</u> time associated with the document, said rendering comprising displaying a correlation framework as a multi-dimensional grid having a respective axis corresponding to each of size, age, and <u>retrieval</u> time of documents, the correlation framework including indices that provide a visual correlation between at least two of the sizes of documents, ages of documents, and <u>retrieval</u> times associated with documents <del>displaying a correlation framework displays the correlation framework</del>;

displaying the document identifier within the correlation framework at a location that indicates at least two of the size of the document, the age of the document, and athe retrieval time associated with the document in relation to the axes of the correlation framework to provide an indication of document property relationships for the document associated with the document identifier and wherein the document identifiers appear as plotted data points within said multidimensional grid;

receiving a user document selection associated with the document identifier; and

retrieving the document associated with the document identifier.

2. (Original) The method of claim 1 wherein the step of accessing document properties for a document comprises the steps of:

,

U.S. Application No.: <u>09/899,653</u>

detecting an update signal indicating that the document properties for the document should be updated;

in response to the update signal:

obtaining a document identity for the document;

forwarding the document identity in a document property request signal to a document server process in order to obtain the document properties for the document identified by the document identity;

receiving the document properties for the document in a document property response signal from the document server process; and

storing the document properties in a document properties file.

- 3. (Original) The method of claim 2 wherein the update signal is automatically and periodically generated such that document properties for the document are automatically and periodically updated.
- 4. (Original) The method of claim 2 wherein, in response to the update signal, the step of accessing document properties for a document further comprises the steps of:

forwarding a time request signal to a document server computer system operating the document server process;

receiving a time response signal from the document server computer system operating the document server process, the time response signal indicating an available communications bandwidth to the document server computer system; and

computing a time document property associated with the document based on the time response signal and a document property corresponding to the size of the document.

-4-

## 5. (Canceled)

U.S. Application No.: <u>09/899,653</u>

6. (Previously presented) The method of claim 1 wherein the steps of accessing and rendering are performed for a plurality of documents using a single correlation framework, such that document identifiers displayed in the single correlation framework for respective documents in the plurality of documents provide an indication of document property relationships between the plurality of documents.

### 7. (Canceled)

#### 8. (Currently Amended) The method of claim 1 wherein:

the correlation framework is a first correlation framework that includes a first set of correlations between document properties for a first set of documents, and wherein the step of rendering a document selection display further includes the steps of:

displaying selections of multiple correlation frameworks on the graphical user interface, each selection associated with a respective correlation framework that provides a correlation between document properties associated with a respective set of documents;

receiving, from the selections of multiple correlation frameworks, a selection of a second correlation framework which correlates document identifiers for a second set of documents to be displayed on the document selection display; and

in response to the step of receiving a selection of a second correlation framework, displaying the second correlation framework including indices that provide a visual correlation between at least two of the sizes, ages, and retrieval times associated with the second set of documents.

U.S. Application No.: <u>09/899,653</u>

9. (Original) The method of claim 8 wherein the step of displaying the second correlation framework replaces the first correlation framework with the second correlation framework on the graphical user interface to present a visual correlation of document properties associated with the second set of documents.

10. (Previously Presented) The method of claim 1 wherein the step of rendering a document selection display further comprises the steps of:

displaying a document link display within the document selection display, the document link display including a document link associated with the document for which the document identifier is displayed on the correlation framework;

wherein the step of receiving a user document selection associated with the document identifier comprises a step of receiving a user selection of the document link in the document link display associated with the document for which the document identifier is displayed on the correlation framework; and

in response to receiving the user document selection, displaying at least a portion of the document properties associated with the document corresponding to the user document selection.

11. (Previously Presented) The method of claim 1 wherein the step of displaying the document identifier within the correlation framework displays the document identifier according to a first perspective visual correlation and wherein the step of rendering a document selection display further comprises the steps of:

displaying at least one view control within the document selection display, the at least one view control allowing a user to manipulate the correlation framework;

detecting a view change operation on the at least one view control; and in response to the step of detecting, transforming the first perspective visual correlation to a second perspective visual correlation based on the view change operation.

12. (Previously Presented) The method of claim 1 wherein the document selection display includes a document access mechanism and wherein the step of receiving a user document selection associated with the document identifier includes the step of detecting operation of the document access mechanism; and

wherein the step of retrieving the document associated with the document identifier is performed in response to the step of detecting operation of the document access mechanism and includes the steps of:

displaying a document display area on the graphical user interface;

retrieving contents of the document; and displaying the contents of the document in a document display area on the graphical user interface.

- 13. (Original) The method of claim 12 wherein the document access mechanism is at least one of:
  - i) a selection of a document identifier;
  - ii) a selection of a document link; and
  - iii) a selection of a document page selection.
- 14. (Currently Amended) A computer system comprising:

an input output interface;

U.S. Application No.: <u>09/899,653</u>

a communications interface;

a display;

a memory;

a processor; and

an interconnection mechanism coupling the input output interface, the communications interface, the display, the memory and the processor;

wherein the memory is encoded with a document viewer application that when performed on the processor, produces a document viewer process that

·U.S. Application No.: <u>09/899,653</u>

causes the computer system to display a graphical user interface on the display allowing a user to access documents by performing the operations of:

accessing document properties for a document, the document properties indicating at least one of a size of the document, an age of the document, and a retrieval time associated with required to obtain the document;

rendering a document selection display on the graphical user interface that provides a document identifier associated with the document, the document identifier indicating, on the document selection display, a correlation between at least two-of-the size of the document, the age of the document, and the retrieval time associated with the document, the rendering including displaying, on the graphical user interface on the display, a correlation framework as a multi-dimensional grid including indices that provide a visual correlation between-at least two-ofof the sizes of documents, ages of documents, and retrieval times associated with documents; and

displaying, on the graphical user interface on the display, the document identifier within the correlation framework at a location that indicates at least two of the size of the document, the age of the document, and athe retrieval time associated with the document in relation to the axes of the correlation framework to provide an indication of document property relationships for the document associated with the document identifier and wherein the document identifiers appear as plotted data points within said multi-dimensional grid;

receiving a user document selection associated with the document identifier via the input output interface; and

retrieving the document associated with the document identifier via the communications interface.

15. (Original) The computer system of claim 14 wherein when the document viewer process causes the computer system to perform the step of accessing document properties for a document, the computer system performs the steps of:

detecting an update signal indicating that the document properties for the document should be updated;

in response to the update signal:

obtaining a document identity for the document;

forwarding the document identity in a document property request signal, via the communications interface, to a document server process in order to obtain the document properties for the document identified by the document identity;

receiving, via the communications interface, the document properties for the document in a document property response signal from the document server process; and

storing the document properties in a document properties file.

- 16. (Original) The computer system of claim 15 wherein the document viewer process automatically and periodically generates the update signal such that document properties for the document are automatically and periodically updated.
- 17. (Original) The computer system of claim 15 wherein in the step of accessing document properties for a document, the computer system further performs the steps of:

forwarding a time request signal to a document server computer system operating the document server process;

receiving a time response signal from the document server computer system operating the document server process, the time response signal indicating an available communications bandwidth to the document server computer system; and

-9-

computing a time document property associated with the document based on the time response signal and a document property corresponding to the size of the document.

### 18. (Canceled)

\*U.S. Application No.: 09/899,653

19. (Previously Presented) The computer system of claim 14 wherein the document viewer process performs the steps of accessing and rendering for a plurality of documents using a single correlation framework displayed on the graphical user interface on the display of the computer system, such that document identifiers displayed in the single correlation framework for respective documents in the plurality of documents provide an indication of document property relationships between the plurality of documents.

#### 20. (Canceled)

21. (Currently Amended)) The computer system of claim 14 wherein:

the correlation framework is a first correlation framework that includes a first set of correlations between document properties for a first set of documents; and

wherein when the document viewer process causes the computer system to perform the step of rendering a document selection display, the document viewer process causes the computer system to further perform the steps of:

displaying selections of multiple correlation frameworks on the graphical user interface, each selection associated with a respective correlation framework that provides a correlation between document properties associated with a respective set of documents;

receiving, from the selections of multiple correlation frameworks, a selection of a second correlation framework which correlates document

U.S. Application No.: 09/899,653

identifiers for a second set of documents to be displayed on the document selection display; and

in response to the step of receiving a selection of a second correlation framework, displaying the second correlation framework including indices that provide a visual correlation between at least two of the sizes, ages, and retrieval times associated with the second set of documents.

-10-

- 22. (Original) The computer system of claim 21 wherein when the document viewer process causes the computer system to perform the step of displaying the second correlation framework, the document viewer process causes the computer system to replaces the first correlation framework with the second correlation framework on the graphical user interface on the display.
- 23. (Previously Presented) The computer system of claim 14 wherein when the document viewer process causes the computer system to perform the step of rendering a document selection display, the document viewer process causes the computer system to perform the steps of:

displaying a document link display within the document selection display, the document link display including a document link associated with the document for which the document identifier is displayed on the correlation framework; and

wherein the step of receiving a user document selection associated with the document identifier includes the step of receiving a user selection of the document link in the document link display associated with the document for which the document identifier is displayed on the correlation framework; and

in response to receiving the user document selection, displaying at least a portion of the document properties associated with the document corresponding to the user document selection.

Attorney Docket No.: <u>SUN01-02</u>

-11-

U.S. Application No.: <u>09/899,653</u>

24. (Previously Presented) The computer system of claim 14 wherein when the document viewer process causes the computer system to perform the step of displaying the document identifier within the correlation framework, the computer system displays the document identifier according to a first perspective visual correlation on the display; and

wherein when the document viewer process causes the computer system to perform the step of rendering a document selection display, the document viewer process causes the computer system to perform the steps of:

displaying at least one view control within the document selection display, the at least one view control allowing a user to manipulate the correlation framework;

detecting a view change operation on the at least one view control; and in response to the step of detecting, transforming the first perspective visual correlation to a second perspective visual correlation based on the view change operation.

25. (Previously Presented) The computer system of claim 14:

wherein the document viewer process produces a document selection display on the display that includes a document access mechanism;

wherein the document viewer process causes the computer system to perform the step of receiving a user document selection associated with the document identifier, wherein the document viewer process causes the computer system to perform the step of detecting operation of the document access mechanism; and

wherein the document viewer process causes the computer system to perform the step of retrieving the document associated with the document identifier in response to the step of detecting operation of the document access mechanism, the document viewer process causes the computer system to perform the steps of:

-12-

displaying a document display area on the graphical user interface on the display;

retrieving a contents of the document; and displaying the contents of a document in a document display area on the graphical user interface.

- 26. (Original) The computer system of claim 25 wherein the document access mechanism is operated by a user using the input output interface to select, on the graphical user interface on the display, at least one of:
  - i) a selection of a document identifier;
  - ii) a selection of a document link; and
  - iii) a selection of a document page selection.
- 27. (Currently Amended)) A computer system comprising:
  - an input output interface;
  - a communications interface;
  - a display;
  - a memory;
  - a processor; and

an interconnection mechanism coupling the input output interface, the communications interface, the display, the memory and the processor;

wherein the memory is encoded with a document viewer application that when performed on the processor, produces a document viewer process that provides a means for the computer system to display a graphical user interface on the display allowing a user to access documents, such means including:

means for accessing document properties for a document, the document properties indicating at least one a size of the document, an age of the document, and a <u>retrieval</u> time <u>for obtainingassociated with</u> the document;

means for rendering a document selection display on the graphical user interface that provides a document identifier associated with the document, the

\*U.S. Application No.: <u>09/899,653</u>

document identifier indicating, on the document selection display, a correlation between at least two of the size of the document, the age of the document, and the <u>retrieval</u> time associated with the document, the means for rendering including means for displaying a correlation framework as a multidimensional grid including indices that provide a correlation between at least two of the sizes of documents, ages of documents, and <u>retrieval</u> times associated with documents;

means for displaying the document identifier within the correlation framework at a location that indicates at least two of the size of the document, the age of the document, and athe retrieval time associated with the document in relation to the axes of the correlation framework to provide an indication of document property relationships for the document associated with the document identifier and wherein the document identifier appears as a plotted point within said multi-dimensional grid;

means for receiving a user document selection associated with the document identifier via the input output interface; and

means for retrieving the document associated with the document identifier via the communications interface.

# 28. (Canceled)

29. (Currently Amended)) A computer program product having a computer-readable medium including computer program logic encoded thereon that, when performed on a computer system having a coupling of a memory, a processor, and a display provides a method for accessing document content using a graphical user interface on the display of the computer system by performing the operations of:

accessing document properties for a document, the document properties indicating at least one of a size of the document, an age of the document, and a retrieval time for obtaining associated with the document;

rendering a document selection display that provides a document identifier associated with the document, the document identifier indicating, on the document selection display, a correlation between at least two of the size of the document, the age of the document, and the retrieval time associated with the document, the rendering including displaying a correlation framework as a multidimensional grid including axes that provide a correlation between at least two of the sizes of documents, ages of documents, and retrieval times associated with documents;

displaying the document identifier within the correlation framework at a location that indicates at least two of the size of the document, the age of the document, and athe retrieval time associated with the document in relation to the axes of the correlation framework to provide an indication of document property relationships for the document associated with the document identifier and wherein the document identifier appears as a plotted point within said multi-dimensional grid;

receiving a user document selection associated with the document identifier; and

retrieving the document associated with the document identifier.

## 30. (Canceled)

31. (Currently Amended)) A method for correlating document information using a graphical user interface, the method comprising the steps of:

displaying a correlation framework as a multidimensional grid including indices that provide a correlation between document properties wherein the document properties include sizes of documents, ages of documents, and retrieval times for obtaining the documents; and

displaying a document identifier as plotted data points within the correlation framework at a location on the correlation framework that provides an indication of values associated with document properties of the document

associated with the document identifier, thus providing an indication of document property values for document properties of the document associated with the document identifier.

32. (Original) The method of claim 31, further comprising the steps of:

receiving a selection of the document identifier from within the correlation framework; and

accessing the document associated with the document identifier in response to receiving the selection of the document identifier associated with the document.

### 33. (Canceled)

34. (New) A method for accessing documents using a graphical user interface, the method comprising the steps of:

accessing document properties for a document, the document properties indicating a size of the document, an age of the document, and a time property indicating the play time of the file;

rendering a document selection display that provides a document identifier associated with the document, the document identifier indicating, on the document selection display, a correlation between the size of the document, the age of the document, and the play time associated with the document, said rendering comprising displaying a correlation framework as a multi-dimensional grid having a respective axis corresponding to each of size, age, and play time of documents, the correlation framework including indices that provide a visual correlation between the sizes of documents, ages of documents, and play times associated with documents;

displaying the document identifier within the correlation framework at a location that indicates the size of the document, the age of the document, and the play time associated with the document in relation to the axes of the

U.S. Application No.: <u>09/899,653</u> Attorney Docket No.: <u>SUN01-02</u>

-16-

correlation framework to provide an indication of document property relationships for the document associated with the document identifier and wherein the document identifiers appear as plotted data points within said multidimensional grid;

receiving a user document selection associated with the document identifier; and

retrieving the document associated with the document identifier.